

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): A method for modulating the immune system of an animal comprising:

growing bacteria in a medium;

exposing said bacteria to biological, chemical or physical stress for at least ~~two~~one or more sequential periods of stress wherein each period of stress is defined by a period of stress exposure of approximately 20 minutes or less so that the bacteria release a stress response product comprising stress response factors (SRFs);

separating said medium and SRFs from said bacteria to form a separated product;

filtering said separated product to remove substances having a molecular weight of greater than 10kDa to form a filtrate; and

administering said filtrate to said animal.

Claims 2-3 (Cancelled).

Claim 4 (Previously presented): The method of claim 1 wherein said medium comprises a non-nutritive saline media at pH values of 6.0 to 8.0.

Claim 5 (Previously presented): The method of claim 4 wherein said saline media is a phosphate-buffered saline having a pH of about 7.0.

Claim 6 (Currently amended): The method of claim 1 wherein the bacteria are selected from the group consisting of Lactobacillus, Staphylococcus, Streptococcus, Pediococcus, Pseudomonas, Bacillus, Escherichia, Listeria, Enterococcus, and Klebsiella. Lactobacillus, Staphylococcus, Streptococcus, Pediococcus, Pseudomonas, Bacillus, Escherichia, Listeria, Enterococcus, and Klebsiella.

Claim 7 (Currently amended): The method of claim 6 wherein the bacteria are selected from the group consisting of L. Lactobacillus -acidophilus, L. Lactobacillus -caseii, L. Lactobacillus -fermentum, L. Lactobacillus -plantarum, L. Lactobacillus -monocytogenes, S. Staphylococcus -aureus, S. Salmonella typhimurium, P. Pediococcus -acidolactici, B. Bacillus coryneforme, E. Escherichia -coli, E. Enterococcus -faecium, S. Streptococcus -pyogenes, and K. Klebsiella -pneumoniae.

Claim 8 (Previously presented): The method of claim 1 wherein the bacteria are propagated at a temperature ranging from approximately 22°C to approximately 37°C.

Claim 9 (Cancelled).

Claim 10 (Previously presented): The method of claim 1 wherein the bacteria are exposed to a stress while they are in the stationary phase of their life cycle.

Claim 11 (Previously presented): The method of claim 1 wherein the filtering step includes: passing said separated product through a 0.22 µm filter to form a sterilized product; and passing said sterilized product through a filter with a molecular weight cutoff of 10 kDa.

Claim 12 (Previously presented): The method of claim 1 wherein the filtrate containing the stress response factors (SRFs) with a molecular weight less than 10kDa is administered to an animal selected from the group consisting of humans, poultry and livestock.

Claim 13 (Cancelled).

Claim 14 (Original): The method of claim 1 wherein the stress response product is administered in a manner selected from the group consisting of orally, topically, and parenterally.

Claim 15 (Previously presented): The method of claim 1 wherein the animal is administered stress response products having a weight of between 0.5 and 3 kDa.

Claim 16 (Original): The method of claim 1 wherein the stress response products are administered as an adjuvant for oral or parenteral vaccines.

Claim 17 (Previously presented): The method of claim 1 wherein the bacteria are exposed to at least two or more sequential periods of stress wherein each period of stress is approximately 10-20 minutes.

Claim 18 (Previously presented): The method of claim 17 wherein the bacteria are exposed to sequential periods of stress by transferring the bacteria from growth media into non-nutritive media in the initial period of stress, then subsequently transferring the bacteria to non-nutritive media in the sequential periods of stress.

Claim 19 (Previously presented): The method of claim 18 wherein the bacteria are exposed to three sequential periods of stress.

Claims 20-22 (Cancelled).